



Indiana State Department of Health

Epidemiology Resource Center

Quick Facts

About... Pinworm

What is Pinworm?

Pinworm is caused by a thin, white roundworm called *Enterobius vermicularis* and is a parasite that lives in the colon and rectum of humans. Pinworm is not a serious condition; however, it can cause severe itching of the anus leading to difficulties sleeping at night. The itching is caused by the female pinworm laying her eggs on the surrounding skin.

How is Pinworm spread?

Pinworm is spread by the fecal-oral route through direct contact or through the shared use of contaminated items. People become infected by ingesting pinworm eggs that are on the hands or on clothing, bedding or other objects and surfaces. Pinworm eggs can also be ingested while breathing if the ova are released into the air. A person can spread pinworm as long as the female roundworms are laying eggs on the skin. The eggs can survive for 2 – 3 weeks on items such as toys, beddings, clothing, or toilet seats. Humans are the only known hosts of pinworms.

Who is at risk for Pinworm?

School-aged and preschool-aged children and institutionalized individuals are at the greatest risk for pinworm infestation so outbreaks are common in these populations. Pinworm infestations are also common among caretakers and household contacts of infested individuals.

How is Pinworm diagnosed?

Pinworms are diagnosed when they are visualized around the anus. Transparent tape can be applied to the skin around the anus to collect eggs that may be present. The tape is then applied to a glass slide and examined

under a low-power microscope. This test should be done as soon as the person wakes up in the morning before they perform any activities, such as bathing, that can remove the eggs from the skin. It is recommended to perform this test for three consecutive mornings to increase the chances of finding pinworm eggs.

How can Pinworms be treated?

It is important to consult a healthcare provider before treating an individual with oral medications. Both prescription and over-the-counter medications are available. The treatment involves 2 doses of medication, with the second dose administered 2 weeks after the first dose. All household contacts and caretakers should be treated at the same time as the infested person to prevent reinfection. Bathing daily and frequent washing of clothing, towels and bedding in hot water can reduce environmental contamination of pinworm eggs and reduce risk of reinfection. Bedding should be handled carefully to avoid releasing pinworm eggs into the air.

How is Pinworms prevented?

Proper handwashing is the most effective way to prevent infection. This includes washing hands before eating or preparing food, after using the toilet and after changing a diaper. Other ways to prevent infection include trimming fingernails short, avoid biting the fingernails and scratching the skin around the anus.

All information presented is intended for public use. For more information, please refer to:

Centers for Disease Control and Prevention website on pinworms:
<http://www.cdc.gov/ncidod/dpd/parasites/pinworm/default.htm>

Kids Health Website:
<http://kidshealth.org/parent/infections/stomach/pinworm.html>

This page was last reviewed October 28, 2011.